

**53<sup>rd</sup>**  
**ATBC**  
**2016**

**19-23 June 2016**

**Le Corum, Montpellier - France**

# **Annual Meeting of the Association for Tropical Biology and Conservation**

**Tropical Ecology and Society  
Reconciling Conservation and  
Sustainable Use of Biodiversity**

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**PROGRAM  
&  
ABSTRACTS**

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**O39-02 – S39** *Capacity building for conservation and sustainable use: challenges and solutions to measuring impact*  
Wednesday 22 June / 08:30-09:30 – Sully3

## Measuring the intangibles of capacity building for conservation

BETH KAPLIN<sup>1</sup>, JEANNETTE BATAMULIZA<sup>2</sup>, ERASME UYIZEYE<sup>1</sup>

<sup>1</sup>Antioch University New England and University of Rwanda, Environmental Studies, 05346, Keene, NH and Butare, USA and Rwanda

<sup>2</sup>University of Rwanda, Center of Excellence in Biodiversity, Biology Dept., Butare, Rwanda

Biodiversity conservation project planning and management in many African countries continues to be driven mainly from the west. Higher education institutions in Africa are often not involved in key conservation research activities. In an effort to address this, the Regional Network for Conservation Educators in the Albertine Rift was born in 2008 to strengthen the role of regional universities and research institutions to play key roles in biodiversity conservation. The network is composed of conservation and environmental science educators and researchers at academic and research institutions and NGOs in the Albertine Rift (Rwanda, Burundi, Uganda, DRC, Tanzania). The goal of the Network is to improve biodiversity conservation, environmental management, sustainable development and capacity for climate change adaptation in the Albertine Rift region by strengthening the capacity of member institutions and enhancing collaborative opportunities. The Network emphasizes strengths in the region for biodiversity conservation, seeks to empower and support the voices and work of individuals. But how do we know we have empowered individuals or strengthened capacity in the region? We can quantify research papers or participation in meetings for example. But we are also interested in the difficult-to-quantify aspects of capacity building and empowerment efforts – the ways that individuals are transformed. We want to if we have addressed factors such as the isolation of instructors and researchers in the region, and if we have empowered individuals. Over the past few years we have been working on various approaches to capture the impacts of the network on biodiversity conservation in the region. We found that relatively simply factors such as a list serve to link individuals in academia in the region increased network member access to training and grant opportunities. We also found that the network enhanced collaborative opportunities among universities in the region, and senior staff connect to and mentor students and junior staff across countries within the network. We believe that these changes will take some time before direct links to improved biodiversity conservation are evident, but both the low number of local conservation initiatives and the heavy reliance on external intellectual, conceptual and financial support for biodiversity conservation and climate change adaptation is neither sustainable nor especially effective.

**O39-03 – S39** *Capacity building for conservation and sustainable use: challenges and solutions to measuring impact*  
Wednesday 22 June / 08:30-09:30 – Sully3

## Forests, People, and the rest of the world: local participation in REDD+ Measuring, Reporting and Verification (PMRV)

MANUEL BOISSIERE<sup>1</sup>, MARTIN HEROLD<sup>2</sup>, STIBNIATI ATMADJA<sup>3</sup>, DOUGLAS SHEIL<sup>4</sup>

<sup>1</sup>Centre de coopération Internationale en Recherche Agronomique pour le Développement (CIRAD), Environnement et Sociétés, 34398, MONTPELLIER, FRANCE

<sup>2</sup>Wageningen University, Department of Environmental Science, 6708PB, Wageningen, The Netherlands

<sup>3</sup>Center for International Forestry Research (CIFOR), Forest and Human Wellbeing, 16115, Bogor, Indonesia

<sup>4</sup>Norwegian University of Life Sciences, Department of Ecology and Natural Resource Management, NO-1432, ÅS, Norway

Community's participation has been promoted as a way to empower local communities in REDD+ programs. A particular goal is that they would monitor forest change and measure carbon stocks, and thus reduce the costs of such assessments. More generically, the recent Paris Climate Agreement has further emphasized the need for transparency in reporting, the importance of the land use sector for both mitigation and adaptation, and the fact the targets can only be achieved through bottom-up engagement of multiple actors. So far, little empirical evidence shows that participatory measurement, reporting and verification (PMRV) is feasible.

A series of multidisciplinary studies investigated the feasibility of local participation into MRV. The research was conducted in Indonesia, Vietnam, Ethiopia, Mexico, and China.

We find that effective PMRV requires local communities' motivation. Motivation depends on people's knowledge, their interests, incentives, tenure, and the relevance of these monitoring activities to their other livelihood activities. Monitoring and reporting changes in forest cover, drivers of change, and carbon sequestration, are in general costly and require the capacity to monitor and report. Other sectors provide some relevant lessons and experiences on reporting from village to national levels. In Indonesia, for example, we learned that the health care system has simpler governance for monitoring and reporting compared to the forestry sector and has successfully been in place for more than 40 years. In contrast, the forestry sector failed in engaging local communities in the reporting of timber and non-timber forest products.

Verification refers to assessing the accuracy, consistency and transparency of measurements to verify the attainment of emission reduction targets. We explain how verification can use a combination of remote sensing data, land use and land cover maps developed by/with villagers to identify gaps and points of disagreement, for which ground check will be necessary.

The notion of "independent" monitoring and multi-stakeholder engagement is gaining momentum and the role of participatory approaches linking both monitoring and management will be central. Communities will play a major role in achieving REDD+ but this requires greater attention to their needs and motivations.